ABSTRACT

A method and apparatus of enforcing the ordering of read and write transactions for an adapter unit connected to a strongly-ordered bus. The adapter unit has a set of read buffers and write buffers. Initiator write transactions and target read completion transactions are performed

5   on the bus in the original order in which the transactions are received. An initiator read transaction request is enqueued in the read buffer but selectively awaits the performance of one or more pending initiator write transactions in the write buffer before the read transaction request is presented to the bus. In this way, initiator write transactions, on which the read transaction request depends, pending in the write buffer are retired to the bus before the initiator read

10   transaction request is performed, thus assuring that the initiator read transaction request is not performed ahead of the initiator write transaction on which the read transaction request depends.